

STATEMENT OF BASIS

**Baton Rouge Chemical Plant
Nova Units
ExxonMobil Chemical Company
Baton Rouge, East Baton Rouge Parish, Louisiana
Agency Interest Number: 286
Activity Number: 19960025
Proposed Permit 2376-V0**

I. APPLICANT:

Company:

ExxonMobil Chemical Company
P.O. Box 241
Baton Rouge, LA 70821

Facility:

Baton Rouge Chemical Plant
4999 Scenic Highway, Baton Rouge, East Baton Rouge Parish, Louisiana 70805
Approximate UTM coordinates are 675.70 kilometers East and 3374.85 kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

The ExxonMobil Baton Rouge Complex was established in 1909. Manufacturing operations have been ongoing continuously at the site since that time. The ExxonMobil Chemical Company Baton Rouge Chemical Plant (BRCP) was founded in 1940 and played an important role in producing synthetic rubber for the military during World War II. It is now one of four ExxonMobil chemical manufacturing facilities in the Baton Rouge area. The Plant also has several manufacturing units that are located within the adjacent Refinery.

The site manufactures a variety of first generation petrochemical products used by others to produce a variety of consumer products. Feeds come primarily from the adjacent ExxonMobil Refinery, although feedstocks are also purchased from outside suppliers and delivered by tanker or barge.

The facility submitted timely applications for initial Part 70 permits for the entire facility and continues to operate pursuant to the "application shield" provided in the program. The following table lists all of the units at BRCP and their permitted status:

Unit	Permit No.	Date Issued	Permitting Status
Acetates	1866T(M-1)	8/2/1995	Unit shutdown; permit rescinded
AIM Tanks	2805-V0	7/12/2002	Received Title V
Aromatics	2299-V1	3/11/2003	Received Title V
AWT Thermal Combustor	1977-V0	10/19/2003	Received Title V

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Unit	Permit No.	Date Issued	Permitting Status
BELA-5	2367-V0	2/17/2006	Merged into Coproducts Received Title V
BPLA	2367-V0	2/17/2006	Merged into Coproducts Received Title V
BRTG	2012-V0	11/18/2002	Received Title V
CPLA	2367-V0	2/17/2006	Merged into Coproducts Received Title V
DARLA	2367-V0	2/17/2006	Merged into Coproducts Received Title V
DILA	2031-V4	11/23/2004	Merged into Maintrain, Received Title V
E-1000	2156-V0	7/3/2003	Received Title V
E-5000	1911-V0	8/31/1999	Title V Renewal under review
Flare Gas Recovery	2390-V0	1/23/2006	Merged into Plant Infrastructure Received Title V
FWPS	Grandfathered	--	Unit shutdown
Halobutyl RLA-1 & HFU	2166-V1	7/16/2004	Received Title V
HCD	2314	4/26/1995	Initial Title V application under review
IPA	1924-V1	7/16/2004	Received Title V
Maintrain	2031-V4	11/23/2004	Received Title V
MEK/SBA	2281-V0	10/1/2002	Received Title V
Neo Acids	2379-V0	12/5/2005	Received Title V
NOVA Alcohol	2123-V0	4/2006	Merged into NOVA Units Receiving Title V with this action
NOVA Ester	2123-V0	4/2006	Merged into NOVA Units Receiving Title V with this action
NOVA Tanks	2123-V0	4/2006	Merged into NOVA Units Receiving Title V with this action
OXO Alcohol	2365-V0	9/29/2005	Received Title V
OXO Tankfield	2393-V0	9/11/2005	Received Title V
PALA	1200-V2	7/16/2004	Received Title V
Plasticizer	2320-V0	12/20/2005	Received Title V
POX	2210-V0	4/4/2005	Received Title V
RLA-3	2376-V0	4/2006	Merged into Vistalon Received Title V Permit
RGR	2361-V0	5/20/2005	Received Title V
SCOLA	2031-V4	11/23/2004	Merged into Maintrain Received Title V Permit
Utilities	2390-V0	1/23/2006	Merged into Plant Infrastructure Received Title V

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Unit	Permit No.	Date Issued	Permitting Status
VFU	2376-V0	4/2006	Merged into Vistalon Received Title V
WILA	2390-V0	1/23/2006	Merged into Plant Infrastructure Received Title V
WWTU	Grandfathered	--	Initial Title V application under review
#5 Light Ends /Poly Unit	2396-V0	10/31/2005	Received Title V

III. PROPOSED PERMIT / PROJECT INFORMATION:

Proposed Permit

A permit application and Emission Inventory Questionnaire (EIQ) dated on October 16, 1996, and September 30, 2005 were received requesting an initial Title V permit for the Nova Units.

A notice requesting public comment on the proposed permit was published in The Advocate, Baton Rouge, Louisiana, on [Insert Date]. The proposed permit was also sent to US EPA Region VI.

Nova Units include the following units: Nova Alcohol Unit, Permit No. 2191(M-2) issued January 21, 1997, Nova Ester Unit, Permit No. 2123(M-3) issued June 22, 1998, and the Nova Tanks, Permit No. 2827-V0 issued January 20, 2003.

Project Description

Minor changes and reconciliations are being incorporated as follows:

- The General Condition XVII and Insignificant Activities lists have been updated.
- The permitted emissions for all sources have been evaluated and reconciled where necessary based on updated emission factors, calculation methodology, and/or emission speciation.

Permitted Air Emissions

Estimated emissions from the Nova Units in tons per year are as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM ₁₀	0.57	2.94	+2.37
SO ₂	4.76	0.02	-4.74

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<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
NO _x	7.01	7.01	-
CO	5.81	5.84	+0.03
VOC	87.01	39.27	-47.74

Prevention of Significant Deterioration Applicability

There will be no net emissions increases in CO, PM₁₀, SO₂, H₂SO₄, H₂S, or NO_x emissions at Nova Units. As such, a PSD analysis is not required.

Non-Attainment New Source Review (NNSR)

There will be no net emissions increase in VOC or NO_x emissions at Nova Units. As such, a NNSR analysis is not required.

Type of Review

This application was reviewed for compliance with the Louisiana Part 70 operating permit program, Louisiana Air Quality Regulations, Louisiana Comprehensive Toxic Air Pollutant Emission Control Program, NSPS and NESHAP. PSD does not apply.

Streamlined Equipment Leak Monitoring Program

The Nova Units comply with a streamlined equipment leak-monitoring program. Compliance with the streamlined program shall serve to comply with each of the fugitive emission monitoring programs being streamlined, as indicated in the following table:

Unit	Program Being Streamlined	Stream Applicability	Overall Most Stringent Program
U-120 FUG41	40 CFR 60 Subpart VV LAC 33:III.2122 LA Non-HON MACT	10% VOC 10% VOC 5% VOTAP	LA Non-HON MACT
U-121 FUG42	40 CFR 60 Subpart VV LAC 33:III.2122	10% VOC 10% VOC	LAC 33:III.2122

MACT requirements

These regulations define maximum achievable control technology (MACT) standards for stationary source categories of hazardous air pollutants (HAPs). These HAPs were listed in the Clean Air Act Amendments of 1990.

The NOVA Units may be subject to the Miscellaneous Organic Chemical Manufacturing NESHAP(Subpart FFFF). This MACT rule was promulgated on November 10, 2003. Source types that are potentially applicable include storage vessels and fugitive

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emissions. Sources that are determined to be applicable to the requirements of Subpart FFFF will be in compliance by the required date.

The IF-05 Hot Oil Furnace (Emission Point No. S-91) was evaluated to determine applicability to the provisions of 40 CFR 63 Subpart DDDDD. Since there are no emission limits or work practice standards for existing boilers and process heaters that burn gaseous fuels only, the affected source must only comply with the Initial Notification of 40 CFR 63 Subpart A.

Air Modeling Analysis

Impact on air quality due to emissions from the Nova Units are below the National Ambient Air Quality Standards (NAAQS) and the Louisiana Ambient Air Standards (AAS) beyond industrial property. Ambient Air Standard compliance has been demonstrated for all emitted air TAPs per BRCP's approved Air Toxic Compliance Plan. Emission changes resulting from this permit will not alter the demonstration.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities refer to Section VIII of the draft Part 70 permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities refer to Section IX of the draft Part 70 permit.

Regulatory Analysis

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit, or where provided, Table X and XI of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit, or where provided, Table X and XI of the draft permit.

IV. PERMIT SHIELDS

No permit shield will be granted with the proposed permits.

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V. PERIODIC MONITORING

The Nova Units are included in the Louisiana Fugitive Emission Program Consolidation. ExxonMobil BRCP conducts fugitive emissions monitoring in accordance with the specific conditions of this program (see Appendix A: Specific Conditions of the permit). Compliance with these specific conditions shall serve to comply with each of the several programs being streamlined.

VI. Glossary

Carbon Monoxide (CO) – A colorless, odorless gas which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

National Emission Standards for Hazardous Air Pollutants (NESHAPs) – The NESHAPs were originally required by the 1970 Clean Air Act (CAA). These standards were developed for sources and source categories that were determined to pose adverse risk to human health by the emission of hazardous air pollutants (HAPs). The standards are set "at the level which ... provides an ample margin of safety to protect the public health from such hazardous air pollutant." These risk-based NESHAPs are located in 40 CFR 61. The NESHAPs program applies to all existing and new/modified sources. Congress directed EPA to develop a program to develop further the regulation of HAPs in Section 112 of the 1990 Clean Air Act Amendments (CAAA). While the standards for major sources of HAPs developed per this section are also designated as NESHAPs, they are established according to Maximum Achievable Control Technology (MACT). These technology-based NESHAPs are located at 40 CFR 63.

Nitrogen Oxides (NO_x) – Compounds whose molecules consist of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) – New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air

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pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (50 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulphur.

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.